



STRUCTURED CABLING SYSTEMS

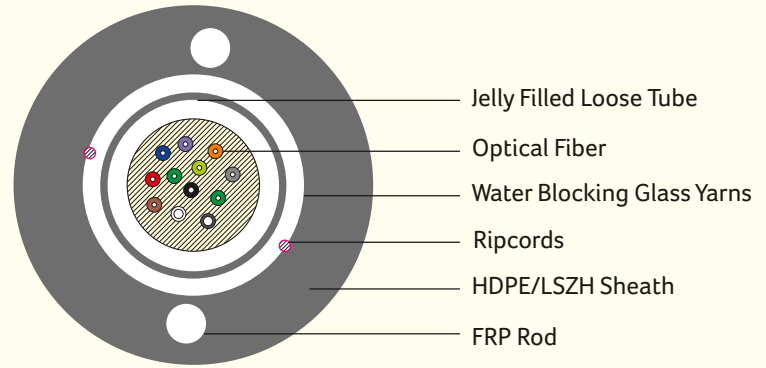
DIGISOL Single Mode (OS2), Unitube Unarmoured Cable

Introduction:-

DIGISOL Single Mode (OS2) Unitube Unarmoured Cable is a direct burial cable with thixotropic jelly in central loose tube to prevent water ingress. Embedded with high strength glass yarns and by using 2 FRP rods provides better tensile strength and antibuckling properties. Available in UVHDPE sheath and LSZH sheath.

Key Features:-

- Suitable for Outdoor network direct burial
- Rodent proof
- UV protection
- Unarmoured design with high strength FRP rod & Glass yarns
- Thermoplastic material loose tube
- Excellent water proof layer and moisture resistance
- Excellent Crush resistance performance
- Light weight and Compact structure



Constructional Specifications:-

Parameters	Fiber Core : 04, 06, 08, 12F	Fiber Core : 24 F
Number of Fiber per Tube	04, 06, 08, 12 nos.	24 nos.
Fiber Colours	* *	* *
Number of Loose Tube	01 no.	01 no.
Loose Tube Colours	Natural	Natural
Loose Tube Internal Diameter	2.2 ± 0.1 mm (PBT)	2.2 ± 0.1 mm (PBT)
Loose Tube Outer Diameter	3.2 ± 0.1 mm (PBT)	3.2 ± 0.1 mm (PBT)
Peripheral Strength Member	1.0 ± 0.05 mm (FRP Rods - 2nos.)	1.0 ± 0.05 mm (FRP Rods - 2nos.)
Peripheral Strength Member	Glass Yarn	Glass Yarn
Number of Rip Cords	02 nos. (Polyester)	02 nos. (Polyester)
Outer Sheath Thickness	2.0 mm (Nominal) (HDPE/LSZH Black)	2.0 mm (Nominal) (HDPE/LSZH Black)
Cable Diameter	9.0 ± 0.5 mm	10.0 ± 0.5 mm
Cable Weight	65.0 ± 5 kg/km / 95.0 ± 5 kg/km	75.0 ± 5 kg/km / 105.0 ± 5 kg/km

Fiber Colours: * *

04 Fibers: Blue, Orange, Green, Brown/Natural
 06 Fibers: Blue, Orange, Green, Brown, Slate, White/Natural
 08 Fibers: Blue, Orange, Green, Brown, Slate, White, Red, Black/Natural
 12 Fibers: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua/Natural
 24 Fibers: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua, Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Natural (Ring marking for the next 12 colors)

Environmental Specifications:-

Storage Temperature : -40 °C to +60° C
 Installation Temperature : -40 °C to +60° C
 Operating Temperature : -20 °C to +60° C

Standards:-

IEC 60793-1 & 60794-1 Telecordia GR-20 Core
 ANSI/TIA 568-C.3 & ISO/IEC 11801 ITU-T REC G.652D

Mechanical Specifications:-

Parameters	Fiber Core : 04, 06, 08, 12, 24 F	Standards
Tensile Strength	1700 N	IEC 60794-1-2-E1
Crush Resistance	2000 N/100 mm	IEC 60794-1-2-E3
Impact Strength	10 N.m	IEC 60794-1-2-E4
Torsion	± 360°	IEC 60794-1-2-E7
Minimum Bend Radius	20 x D	IEC 60794-1-2-E11

Optical Fiber Specifications:-

Parameters	Fiber Core : 04, 06, 08, 12, 24 F
Fiber Type	G.652D (OS2)
Attenuation	≤ 0.38 dB/km (@1310 nm)
	≤ 0.25 dB/km (@1550 nm)
Chromatic Dispersion	≤ 3.5 ps/nm.km (@1285 - 1330 nm)
	≤ 18 ps/nm.km (@1550 nm)
Zero Dispersion Wavelength	1300 - 1324 nm
Zero Dispersion Slope	≤ 0.092 ps/nm ² .km
Polarisation Mode Dispersion	≤ 0.2 ps/√km
Cut-off Wavelength	≤ 1260 nm
Mode Field Diameter	9.2 ± 0.4 μm (@1310 nm)
Core Cladding Concentricity Error	≤ 0.8 μm
Cladding Diameter	125 ± 1 μm
Cladding Non-circularity	≤ 1 %
Coating Diameter	245 ± 10 μm

Cable Size & Standard Length:-

4F to 12F : 4.0 kms ± 10%
 24F : 2.0 kms ± 10%

Ordering Information:-

Part Codes	Description
DGF-CUS2OUSX-YY	DIGISOL SM(OS2) UNITUBE, UNARMoured, Y CORE, XX

Note: X / XX - Sheath Material - H / HDPE, L / LSZH

YY / Y - Number of fiber cores - 04 / 4, 06 / 6, 08 / 8, 12 / 12, 24 / 24.

Example: DGF-CUS2OUSH-04 - DIGISOL SM(OS2) UNITUBE, UNARMoured, 4 CORE, HDPE
 DGF-CUS2OUSL-06 - DIGISOL SM(OS2) UNITUBE, UNARMoured, 6 CORE, LSZH